# TECHNICAL REVIEW DOCUMENT for RENEWAL of OPERATING PERMIT 990PEP219

Waste Management of Colorado, Inc. Colorado Springs Recycling and Disposal Facility

> El Paso County Source ID 0410157

Prepared by Matthew S. Burgett November – December 2007

# I. Purpose:

This document will establish the basis for decisions made regarding the applicable requirements, emission factors, monitoring plan and compliance status of emission units covered by the renewed operating permit proposed for this site. The original Operating Permit was issued April 1, 2001, and expired on April 1, 2006. This document is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. The conclusions made in this report are based on information provided in the renewal application submitted March 30, 2005. Please note that copies of the Technical Review Document for the original permit and any Technical Review Documents associated with subsequent modifications of the original Operating Permit may be found in the Division files as well as on the Division website at <a href="http://www.cdphe.state.co.us/ap/Titlev.html">http://www.cdphe.state.co.us/ap/Titlev.html</a>.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised Construction Permit.

### II. Description of Source

The Colorado Springs Recycling and Disposal facility is a municipal solid waste landfill. Fugitive dust emissions are generated by vehicular traffic on paved and unpaved roads, wind erosion of stockpiles, and material handling operations. Landfill gas emissions are generated through the degradation of biodegradable waste in the landfill. The landfill has recently expanded operations into the area previously

identified as the "Expansion Area". It is now estimated that the landfill will reach closure in 2073. The total volume of waste at closure is estimated to be 23,014,808 Mg according to the amended design capacity report submitted with the renewal OP.

The landfill is located on Highway 93 in Colorado Springs, El Paso County. This area of Colorado is designated as attainment for all criteria pollutants. There are no affected states within 50 miles of the facility. There are no Federal Class I designated areas within 100 kilometers of the plant.

Based on the information provided in the renewal application, the following changes have been requested:

- The source is requesting a revision of the VOC emission limit based on emissions estimated using the year 2000 Tier II test results (471.1 ppmv).
- The source has updated the insignificant activity list.
- The source requests a compliance condition for AQCC Regulation No. 15

   Control of Ozone Depleting Compounds due to the landfill servicing motor vehicle air conditioners. A compliance condition is not necessary since compliance with Regulation No. 15 is required as part of the Section IV General Permit Conditions.

The summary of emissions that was presented in the Technical Review Document (TRD) for the original permit issuance has been modified to reflect the most recent emission factors and emission estimates (based on historic waste acceptance rates).

# Facility-wide emissions are outlined below:

Pollutant	Potential-to-Emit (tons/yr)	Actual Emissions – 2004 (tons/yr)
Fugitive PM <sub>10</sub>	104.1	21.9
Fugitive PM	400.7	87.9
CO	7.9	2.9
VOC	28.2	7.5
HAP	21.2	7.9

The potential-to-emit (PTE) VOC emissions are calculated from EPA's Landfill Gas Emissions Model (LandGEM). This emission rate is based on the landfill's maximum design capacity estimated to be reached in 2074. The actual emissions found in the table above are the emissions for 2004 and reported by Waste Management in the Operating Permit renewal application. The CO and HAP PTE above represent the PTE reported in the renewal application. The Division's CO and HAP PTE calculations were slightly lower than those listed above.

# **Compliance Assurance Monitoring (CAM) Applicability**

The landfill does not utilize any control equipment subject to the CAM requirements.

### III. Discussion of Modifications Made

# **Source Requested Modifications**

The insignificant activity list has been updated.

The Waste Management mailing address has been updated.

The Division estimated landfill gas emissions using EPA's LandGEM and the Tier II result of 471.1 ppmv. The Division assumed VOC emissions are 39% of the NMOC emissions as stated by AP-42 2.4. The PTE VOC emissions calculated by the Division are slightly higher than those calculated by Waste Management. The Division will include a VOC limit of 28.2 TPY in the permit since this is more conservative estimate than Waste Management's estimate. This is a reduction from the previous permit limit of 55 TPY.

Waste Management submitted revised fugitive dust emission calculations. The PTE of PM<sub>10</sub> has not increased more than 15 TPY from the previous TRD, and emission modeling is not triggered per the Division's modeling guidance.

The landfill expansion is considered a modification for the purposes of NSPS WWW. Since the landfill has undergone an expansion, it is now subject to the requirements of NSPS WWW instead of the Subpart Cc Emission Guidelines. The Division has inserted the NSPS WWW requirements in place of the Cc requirements.

Waste Management submitted comments on the draft permit. The following additional changes were made to the permit based on the February 15, 2008 comments letter:

Waste Management updated the facility contact person to be Ms. Jessica Walko.

The location address has been updated due to the relocation of the entrance facility. The location address and directions have been updated.

Waste Management requested the report due dates as May 1 and November 1.

Condition 2.2.2 has been reworded to be consistent with other recently issued landfill permits. However, the speed limit has remained to be 15 mph in the permit requirement since this is the speed used in the fugitive emission calculations.

Condition 2.2.5 has been reworded to require clean up of mud and dirt carryout only on days when the site is operating. The Division did not use the specific language suggested by Waste Management, which used the term "excessive" mud or dirt carryout. Carryout does not necessarily need to be excessive to contribute to fugitive dust emissions.

An additional 10,000 gallon aboveground diesel storage tank was added to the list of insignificant activities.

### Other Modifications

In addition to the requested modifications, the Division has included changes to make the permit more consistent with recently issued permits, included comments made by EPA on other Operating Permits, as well as corrected errors or omissions identified during inspections and/or discrepancies identified during review of this renewal.

These changes are as follows:

### Page following the cover page

It should be noted that the monitoring and compliance periods and report and certification due dates are shown as examples. The appropriate monitoring and compliance periods and report and certification due dates will be filled in after permit issuance and will be based on permit issuance date. Note that the source may request to keep the same monitoring and compliance periods and report and certification due dates as were provided in the original permit. However, it should be noted that with this option, depending on the permit issuance date, the first monitoring period and compliance period may be short (i.e. less than 6 months and less than 1 year).

 Added language specifying that the semi-annual reports and compliance certifications are due in the Division's office and that postmarks cannot be used for purposes of determining the timely receipt of such reports/certifications.

# Section I - General Activities and Summary

- Revised Condition 1.1 to have a more accurate description of the emission sources.
- Conditions 13 and 17 in Condition 1.4 were renumbered to 14 and 18 and Condition 21 in Condition 1.5 was renumbered to 22. The renumbering changes were necessary due to the addition of the Common Provisions requirements in the General Conditions of the permit. In addition, General Conditions 3.d & 3.g (common provisions, affirmative defense) were added as a State-only requirement.

- Minor language changes were made to Condition 3.1 to more appropriately reflect the status of the source with respect to PSD.
- Based on comments made by EPA on another operating permit, the phrase "Based on the information provided by the applicant" was added to the beginning of Condition 4.1 (112(r)).
- Added a "new" Section 5 for compliance assurance monitoring (CAM).

# Section II - Specific Permit Terms

- The requirement to calculate emissions from the landfill gas generation
  was changed from monthly to annually. The accepted method used to
  estimate these emissions does not generate valuable results with a
  monthly calculation. The method is designed only to accurately estimate
  emissions on an annual basis. The Division also allows calculation using
  AP42 2.4 methods, which is what LandGEM is based on.
- The waste acceptance tracking requirement was split out into Condition
   1.2 and specified that an annual calculation is required.
- Modified the NSPS Cc, and Regulation No. 6, Part A, Subpart A, General Provisions language to be consistent with other recently issued Operating Permits for landfills.
- Condition 2.1 was revised to more clearly and accurately represent the Regulation No.1 fugitive dust guidelines.

# Section III - Permit Shield

The citation in the permit shield was corrected.

#### Section IV - General Conditions

- Added language from the Common Provisions (new condition 3). With this change the reference to "21.d" in Condition 20 (prompt deviation reporting) will be changed to "22.d", since the general conditions are renumbered with the addition of the Common Provisions.
- The upset language in Condition 3.d has been replaced with the affirmative defense provision for excess emission during malfunctions language.
- Removed the upset and breakdown provisions from Condition 4 (emergency provisions) since they are included in the Common Provisions.

- Condition 5 "upset" was replaced with "malfunction".
- The citation in General Condition 16 (open burning) was revised. The open burning requirements are no longer in Reg 1 but are in new Reg 9. In addition, changed the reference in the text from "Reg 1" to "Reg 9".
- The definition of "prompt" has changed. Condition 21 has been updated.
- The language in 22d has been modified slightly.

# **Appendices**

- Appendix B & C have been updated to the current version (02/20/2007).
   The requirement to determine if data was continuous has been removed from Appendix C.
- The table in Appendix F was cleared.